

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554**

In the Matter of	)	
	)	
Revision of the Commission's Rules to	)	
Ensure Compatibility with Enhanced 911	)	
Emergency Calling Systems	)	
	)	CC Docket No. 94-102
Devon Mobile Communications L.P.	)	
Petition for a Limited Partial Waiver of	)	
the E911 Location Technology	)	
Implementation Rules	)	

**PETITION FOR A LIMITED PARTIAL WAIVER OF THE E911 LOCATION  
TECHNOLOGY IMPLEMENTATION RULES**

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## SUMMARY

Devon Mobile Communications L.P. (“Devon”), a designated entity, seeks a limited partial waiver, to the extent necessary, of the Phase II enhanced 911 (“E911”) obligations set forth in Sections 20.18(e) and (g) of the Commission’s Rules. The waiver sought by Devon is similar to the waivers granted by the Commission to Sprint Spectrum L.P. d/b/a Sprint PCS (“Sprint PCS”) and Verizon Wireless on October 12, 2001, but seeks timeframes more appropriate to Devon’s facts and circumstances. Devon is a small broadband wireless carrier just getting started providing commercial service to the public and is currently licensed to operate commercial wireless networks pursuant to broadband Personal Communications Services (“PCS”) licenses covering 30 Basic Trading Areas (“BTAs”) in predominately smaller second tier markets in Maine, New York, North Carolina, Pennsylvania, Vermont, Virginia and West Virginia. Devon has recently completed construction of its broadband PCS networks in only a few of its markets, namely three BTAs in Virginia and six BTAs in Pennsylvania, but Devon is engaged in an aggressive build-out of all of its remaining markets. Devon has chosen an assisted GPS (“AGPS”) E911 solution for its Code Division Multiple Access (“CDMA”) Lucent Technologies (“Lucent”) networks.

Due to unavailability of GPS handsets, Devon seeks the following limited partial waiver of the Commission’s handset implementation milestones set forth in Section 20.18(g)(1):

- Devon will begin sales of ALI-capable handsets with the MSM5100 Qualcomm chipset as soon as they are commercially available and tested by Devon, but in any event Devon will sell ALI-capable handsets using either the MSM3300 or MSM5100 Qualcomm chipsets if commercially available to Devon by June 30, 2002.
- 25 percent of all new Devon activations are expected to be ALI-capable by September 30, 2002.
- 50 percent of all new Devon activations are expected to be ALI-capable by January 31, 2003
- 100 percent of all new activations will be ALI-compliant by October 31, 2003.

In addition, due to the lack of general availability of the necessary network hardware and software to implement its AGPS solution, Devon seeks a limited waiver of the deployment schedule of Section 20.18(g)(2) to implement any necessary network software upgrades and network components for the AGPS E911 solution until the later of: the fourth quarter 2002, or six months following Devon's receipt of a valid Public Safety Answering Point ("PSAP") request pursuant to Section 20.18(j) of the for Phase II location information.

Devon has investigated the availability of AGPS handsets and none are currently available, nor is any expected to be available using the Qualcomm MSM5100 chipset until at the earliest second quarter 2002. Devon is just beginning to build a subscriber base so the benefit of seeding location-capable handsets until Devon has completed its network construction would be of minimal value. In addition, deployment of AGPS handsets in advance of the Qualcomm MSM5100 chipset will harm competition because Devon will be forced to sell handsets which will not meet the needs of its cost sensitive subscribers.

Devon has also investigated the necessary Lucent network hardware and software to implement Phase II E911 and such network hardware and software is not yet generally available nor will all components be generally available until February 1, 2002 at the earliest. In addition, Devon does not believe other network-based Phase II E911 solutions are viable for its CDMA network. Further, because of Devon's network configuration and intent to serve cost conscious consumers, Devon must deploy the necessary hardware and software in a centralized fashion. The centralized facility, however, will not be available until March 2002. Furthermore, because of Devon's limited technical resources, which are being consumed to meet the Devon's aggressive build-out schedule, Devon will not be able to install, integrate, and test the necessary hardware and software until the fourth quarter of 2002 without hindering its ability to compete in the market. Finally, Devon as a smaller carrier will take a second chair to larger carriers in deployment and testing of such network E911 solutions and the necessary hardware and software is not expected to be available until six to nine months after general availability, which has not yet occurred.

Devon's waiver is consistent with the Commission's *Fourth Memorandum Opinion and Order* in this docket and with the public interest. Devon seeks a specific waiver related to "technology-related" issues. In addition, Devon has taken its E911 responsibilities seriously and has undertaken a number of actions to come as close as possible to full compliance. The public interest is satisfied by a grant of Devon's waiver because: (a) it will produce the same benefits as the Commission has acknowledged in granting the waivers of Sprint PCS and Verizon Wireless; (b) location information will be available earlier than if a network solution was deployed and with more accuracy; (c) Devon's proposed solution will allow for greater interoperability for roaming subscribers; (d) the waiver will allow Devon to concentrate its resources on constructing its system to be able to compete more effectively; (e) any delay will not be harmful since Devon cannot aggressive market to consumers until it has completed construction of its systems; and (f) a denial of the requested waiver would be discriminatory since the Commission has previously granted waivers to other CDMA network operators.

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Devon Mobile Communications L.P. ( "Devon"), by its attorney and pursuant to Sections 1.3 and 1.925 of the Commission's Rules<sup>1</sup> and the Commission's October 19, 2001 Public Notice,<sup>2</sup> hereby requests a limited partial waiver, to the extent necessary, of the Phase II enhanced 911 ("E911") obligations set forth in Sections 20.18(e) and (g) of the Commission's Rules. Specifically, Devon seeks a limited partial waiver similar to the waivers already granted by the Commission to Sprint PCS and Verizon Wireless to implement a hybrid assisted global positioning satellite ("AGPS") enhanced 911 ("E911") Phase II solution, but on a slightly different schedule than that approved for Sprint and Verizon Wireless to take into account the different circumstances between licensees in first tier and second tier markets.<sup>3</sup> For the reasons set forth in greater detail below, the Commission should grant Devon the requested limited

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<sup>1</sup> 47 C.F.R. §§ 1.3 and 1.925

<sup>2</sup> Public Notice, *Wireless Telecommunications Bureau Provided Guidance on Filings by Small and Mid-Sized Carriers Seeking Relief from Wireless E911 Phase II Automatic Location Identification Rules*, CC Docket 94-102, DA 01-2459 (Rel. Oct. 19, 2001)("Notice").

<sup>3</sup> See Order, *Request for Waiver by Sprint Spectrum L.P. d/b/a Sprint PCS*, FCC 01-297 (Rel. Oct. 12, 2001)("Sprint Order"); Order, *Request for Waiver by Verizon Wireless*, FCC 01-299 (Rel. Oct. 12, 2001)("Verizon Wireless Order"). Verizon Wireless has sought reconsideration of the *Verizon Wireless Order*. See Public Notice, *Cingular, Nextel, and Verizon File Petitions for Reconsideration of Commission Orders on Wireless E911 Phase II Waiver Requests*, CC Docket 94-102, DA 01-2722 (Rel. Nov. 20, 2001).

partial waiver because Devon is similarly situated to the other carriers -- Sprint and Verizon Wireless -- to whom the Commission previously granted waivers and the requested limited partial waiver sought by Devon satisfies the applicable Commission waiver standard as articulated by the Commission in the *Fourth M&O*<sup>4</sup> and the *Notice*. Furthermore, a grant of the requested limited waiver would serve the public interest.

## **I. INTRODUCTION AND SUMMARY**

### **A. BACKGROUND**

Devon is a designated entity just getting started who is currently licensed to operate a commercial wireless network pursuant to broadband Personal Communications Services ("PCS") licenses covering 30 Basic Trading Areas ("BTAs") in predominately smaller second tier markets in Maine, New York, Pennsylvania, Vermont and Virginia.<sup>5</sup> Devon has completed construction of its broadband PCS networks in only a few of its markets, namely three BTAs in Virginia and six BTAs in Pennsylvania, but Devon is engaged in an aggressive build-out of all of its remaining markets. Devon anticipates that it will finish construction of all of its remaining markets by December 2002, but in any event in accordance with the timelines and construction requirements of Part 24 of the Commission's Rules.<sup>6</sup>

Devon's current strategy is to provide low cost local wireless service in direct competition with the wireline telephone company similar to the marketing model being used by Leap Wireless and others. In order to gain the economies of scale that are required to offer such services, Devon is utilizing the Code Division Multiple Access ("CDMA") standard in its networks. As Devon has previously reported in its E911 Reports, Devon utilizes Lucent Technologies ("Lucent") network infrastructure equipment as does many other CDMA network

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<sup>4</sup> See *Fourth Memorandum Opinion and Order*, Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems, CC Docket 94-102, FCC 00-326 (Rel. September 8, 2000) ("Fourth MO&O") at ¶¶ 42-45.

<sup>5</sup> Exhibit A to this Petition lists the BTAs where Devon currently holds Commission authorizations. This limited partial waiver request extends to all Commission authorizations now held or acquired in the future by Devon.

<sup>6</sup> Exhibit A lists the dates that Devon expects to complete construction and begin offering service in each of its BTAs.

operators, including Qwest Wireless , LLC (“Qwest”), Sprint PCS (“Sprint”), Alltel Communications, Inc. (“Alltel”), and Verizon Wireless (“Verizon Wireless”).<sup>7</sup> After exploring the options available to Devon to meet the Commission’s E911 Phase II requirements, Devon elected to deploy the same hybrid handset based AGPS solution as other CDMA licensees,<sup>8</sup> such as Sprint and Verizon Wireless,<sup>9</sup> because network-based solutions would not work well in Devon’s networks.

As a result of Devon’s low cost service model, its limited technical resources, and its relative small size, Devon must deploy its E911 network equipment in a centralized fashion. By centralizing compliance functions at a single location, Devon is able to provide better service to the law enforcement and public safety community while at the same time minimizing cost.<sup>10</sup> For a variety of reasons, Devon has concluded that the centralized E911 facility will be co-located with Devon’s Buffalo, New York switch facility. In this centralized facility, Devon will provide both Phase I and Phase II E911 information. Devon is currently constructing its Buffalo, New York switch facility and expects that such facility will be completed and ready for installation of the necessary Lucent software and hardware in the first quarter of 2002.<sup>11</sup>

Devon does not design or manufacture handsets or infrastructure equipment nor write software and therefore Devon is completely dependent upon others, namely handset and

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<sup>7</sup> See Devon Mobile Communications L.P. Report, dated October 30, 2000.

<sup>8</sup> See Devon Mobile Communications L.P. Report, dated September 10, 2001.

<sup>9</sup> See Order, *Request for Waiver by Sprint Spectrum L.P. d/b/a Sprint PCS*, FCC 01-297 (Rel. Oct. 12, 2001)(“*Sprint Order*”); Order, *Request for Waiver by Verizon Wireless*, FCC 01-299 (Rel. Oct. 12, 2001)(“*Verizon Wireless Order*”).

<sup>10</sup> Devon also currently plans to provide its centralized CALEA functions at this location as well.

<sup>11</sup> Devon anticipates completing construction of its Buffalo, New York facility in March 2002. Accordingly, Devon will not be able to test the Lucent software until after the Buffalo, New York switch facility is completed. However, Devon does not expect that it will be able to have all of the Lucent software installed when the Buffalo, New York switch facility is first made operational because Devon, as a small carrier with limited technical resources, will have to devote a significant number of those resources to system issues attendant with the turn up of its facilities. The first order of priority is to meet the current Phase I requests which Devon anticipates it will be able to meet within six months of the completion of construction of its systems. Once Devon has installed, tested, and begun using the Phase I software, Devon intends to work diligently and expeditiously to install the Lucent E911 Phase II software in Buffalo, New York. However, due to limited technical resources among other problems, Devon may not be able to complete installation of the Phase II software and hardware before the third quarter of 2002 and testing would commence thereafter.



infrastructure manufacturers, for compliance with the Commission's E911 Phase II Rules. Further, Devon, a designated entity with a relatively few BTAs, does not command the same attention in terms of product deliveries or infrastructure development from these manufacturers as other larger carriers, such as Sprint and Verizon Wireless. Accordingly, Devon must take a second seat to those carriers and Devon will for the most part to receive the necessary handsets, equipment, or software well after those same handsets, equipment, and software are available to, and in many instances deployed by, the larger carriers. Finally, Devon as a small carrier can ill-afford to deploy handsets, equipment, and software prior to constructing most of its markets because it will not have the critical core of service to attract subscribers.

Finally, Devon has and is taking its E911 responsibilities seriously. As shown in Exhibit B to this Waiver, Devon to date has received five requests for Phase I E911 location capability. To date, Devon has contacted each of the requesting PSAPs and notified them of Devon's system status and the anticipated date that Devon would commence providing service to the public.<sup>12</sup> In addition, Devon is working diligently to have Phase I information available to those PSAPs which have submitted valid Phase I requests within six months of commercial service in that market to the public.

## **B. SUMMARY OF LIMITED PARTIAL WAIVER SOUGHT**

In the instant Petition, Devon seeks a limited partial waiver of two aspects of the Commission's current Phase II E911 Rules. First, Devon seeks a limited partial waiver of the location-capable handset deployment schedule. As is readily apparent from the filings of virtually all CDMA carriers other than Sprint, no location-capable handsets were available by

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<sup>12</sup> Devon obviously does not have an obligation to provide Phase I E911 information prior to commercial operation of its systems and Devon, in informal discussions with Commission staff, understands that it should begin providing Phase I information to all PSAPs making a valid request within six months of completion of construction, even if the PSAP made the request more than six months prior to commercial service. Given that Devon anticipates that it will begin providing Phase I information by the middle of March 2002, it will be providing Phase I information in compliance with the Commission's Rules. However, out of an abundance of caution, Devon herein seeks a waiver, to the extent one is necessary, of the six month requirement to provide Phase I information to PSAPs who made requests prior to launch of Devon's commercial service to allow Devon to complete the construction of its centralized E911 system.

October 1, 2001, and for the most part AGPS-capable handsets will become commercially available to carriers, such as Devon, at the earliest in the second to fourth quarter of 2002.<sup>13</sup>

Accordingly, to the extent a waiver is necessary,<sup>14</sup> Devon seeks a limited partial waiver of handset deployment milestones set forth in Section 20.18(g)(1) as follows:

- Devon will begin sales of ALI-capable handsets with the MSM5100 Qualcomm chipset as soon as they are commercially available and tested by Devon, but in any event Devon will sell ALI-capable handsets using either the MSM3300 or MSM5100 Qualcomm chipsets if commercially available to Devon by June 30, 2002.<sup>15</sup>
- 25 percent of all new Devon activations are expected to be ALI-capable by September 30, 2002.<sup>16</sup>
- 50 percent of all new Devon activations are expected to be ALI-capable by January 31, 2003
- 100 percent of all new activations will be ALI-compliant by October 31, 2003.

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<sup>13</sup> See Verizon Wireless Updated Phase II E911 Report and Request for Limited Waiver, dated July 25, 2001 (“Verizon Wireless Waiver”) at p. 13; See also Qwest Wireless, LLC and TW Wireless, LLC, *Petition for Extension of Time or Waiver of Section 20.18 of the Rules*, Filed July 23, 2001, (“Qwest Waiver”) at p. 18; Alltel Communications, Inc., *Petition for Waiver of Sections 20.18(e) and (g) of the Commission’s Rules*, Filed July 25, 2001, Appendix D (“Alltel Waiver”). Sprint claims that it was able to purchase limited quantities of location-capable handsets by October 1, 2001, but Devon understands that Sprint may have an exclusive arrangement with Samsung, the supplier, which precludes carriers such as Devon from purchasing such handsets. See Leap Wireless International, Inc., *Petition for Partial Waiver of E-911 Phase II Implementation Milestones*, filed August 23, 2001 (“Leap Waiver”) at p. 15.

<sup>14</sup> Obviously, to the extent that Devon is not yet providing service in a market, it has no obligation to provide E911 Phase II compliant handsets in that market. Further, Devon believes that it should not have an obligation to begin actively selling AGPS handsets until it has begun actively marketing its services in the market. Any other view would go against the intent of the Commission in requiring carriers who choose the handset solution to begin selling location capable handsets ahead of having the necessary network hardware and software in place. The Commission mandated carriers begin selling handsets to “seed” the market in advance of actually having the network components in place. Since Devon is only engaged currently in limited marketing of its services in its markets until its has completed construction of most of the BTAs in a region, it would serve no useful purposes to have Devon actively sell location-capable handsets because the number of handsets sold would be relatively modest and would not significantly contribute to a the 95% handset penetration goal. Further, the cost of deploying expensive handsets which would be superseded almost immediately is substantial. Devon believes that the Commission should weigh the minimal benefits of deploying E911 handsets prior to aggressive marketing against the substantial costs involved and grant Devon a waiver of the deployment schedule as outlined herein.

<sup>15</sup> As Qwest points out, handsets with the current generation of MSM3300 Qualcomm chipset will be offered in limited supply since Qualcomm is planning to release the MSM5100 location-capable chipset for use in the next generation of handsets at the end of the second quarter 2002. See *Qwest Waiver* at p. 17 fn. 39.

<sup>16</sup> In the unlikely event that Devon is unable to secure AGPS-capable handsets using either chipset by June 30, 2002, Devon proposes that this milestone be eliminated and Devon only have a requirement to have 50% of its activations be ALI-capable by January 31, 2003.

- 95 percent of all Devon customers will use handsets that are ALI-capable by December 31, 2005 in accordance with the Commission's current rules.

Second, out of an abundance of caution, Devon also seeks a limited partial waiver of the deployment schedule for the network software and hardware associated with delivering AGPS in a market. Devon's network infrastructure manufacturer, Lucent is currently indicating that the necessary network software and hardware components to deploy AGPS will not be generally available ("GA") prior to February 1, 2002. Since Devon may not place orders for the necessary network software and hardware prior to the GA date, completion and activation of Phase II E911 in Devon's network would be subject to Lucent's standard delivery, installation, integration, and testing intervals.<sup>17</sup> Accordingly, Devon seeks a limited waiver of the deployment schedule of Section 20.18(g)(2) to implement any necessary network software upgrades and network components for the AGPS E911 solution until the later of: the fourth quarter 2002, or six months following Devon's receipt of a valid PSAP request pursuant to Section 20.18(j) for Phase II location information.<sup>18</sup>

Devon is not alone in filing for a waiver of the impending Commission deadlines. To date, the Commission has granted waivers to the two largest carriers using CDMA technology – Verizon Wireless and Sprint<sup>19</sup>-- and other licensees who are operating CDMA systems have determined that they cannot meet the current Commission deadlines for Phase II E911

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<sup>17</sup> In addition, Devon has limited engineering resources to test the software prior to completion of the Buffalo, New York facility. Therefore any testing to ensure that the Lucent software and hardware components meet OET 71 would at the earliest be completed after the software and hardware components become generally available.

<sup>18</sup> Devon does not have an obligation to provide network solutions for E911 Phase II prior to construction of its systems and Devon has received informal advice from the Commission staff that Devon has 6 months from the time its system is constructed to order to provide E911 Phase II network functionality for all valid PSAP requests received prior to completion of construction. Accordingly, it is Devon's position that it does not need to comply with the Phase II PSAP request it received in April 2001 until at least March 2002. Nonetheless, in the markets Devon has already received Phase II requests, it will not be able to meet the 6 months from completion of construction timeframe because Devon will not have the necessary equipment installed in time to provide that service by the end of the first quarter of 2002. Accordingly, Devon PCS seeks a waiver at this time with specific timelines on implementation.

<sup>19</sup> *Sprint Order* and *Verizon Wireless Order*.

compliance and are seeking waivers as well.<sup>20</sup> As is set forth in greater detail below, Devon meets the waiver standards set forth in the *Fourth MO&O* and the *Notice* and the requested waiver serves the public interest.<sup>21</sup> Therefore, the Commission should expeditiously grant Devon the requested limited partial waivers.

## **II. REQUEST FOR WAIVER**

### **A. THE NECESSARY HANDSETS AND NETWORK COMPONENTS TO OFFER DEVON'S SELECTED PHASE II TECHNOLOGY WILL NOT BE AVAILABLE IN ACCORDANCE WITH THE COMMISSION'S E911 MILESTONES**

Devon has selected to use a handset based ALI-location technology solution to meet its E911 Phase II obligations. Devon, like other CDMA carriers, does not believe that other non-AGPS technologies adequately meet the technical and regulatory requirements under the Commission's Rules. Further, as is demonstrated below, Devon concurs with the other CDMA licensees that the AGPS technology is the best technology to deploy given that it will become available in the same timeframes as other solutions, is less expensive to deploy, will ultimately provide better accuracy, and, since most CDMA carriers are implementing AGPS solutions, will allow Devon's network to be interoperable and seamlessly hand off emergency calls with other CDMA carriers. However, as is outlined herein, Devon will not be able to meet the Commission's E911 deployment milestones and therefore a waiver is necessary.<sup>22</sup>

#### **1. HANDSETS**

To determine when Devon could realistically expect to deploy location-capable handsets, Devon consulted with numerous handset vendors, reviewed the waivers granted by the Commission to Sprint and Verizon Wireless, and reviewed the waiver filings of other CDMA

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<sup>20</sup> See, e.g., *Alltel Waiver*; *Leap Waiver*; *Qwest Waiver*; Carolinas PCS I Limited Partnership, *Petition to Waiver Section 20.18(e) of the Commission's Rules*, filed February 6, 2001 ("Carolinas PCS Waiver"); and Inland Cellular Telephone Company, *Petition for Limited Waiver of Sections 20.18(e) and 20.18(g) of the Rules*, filed July 30, 2001 ("Inland Cellular Waiver").

<sup>21</sup> See *Fourth MO&O* at ¶¶ 42-45.

<sup>22</sup> See 47 C.F.R. §§ 20.18(f), g(1)(i), g(2)(i).

carriers. Based on this investigation, Devon understands that no AGPS handset is expected to be generally commercially available to Devon until December 2001 and most will be available in mid to late 2002. For example, Devon contacted four handset vendors directly -- Nokia, Ericsson, Kyocera, and Samsung -- and contacted Motorola's distributors. Based on the responses received to date, Nokia will have a product commercially available for purchase by Devon late fourth quarter 2002 and Kyocera will have a product available with the MSM5100 chipset by the third quarter 2002.<sup>23</sup> Ericsson responded that although it currently offers CDMA handsets Ericsson did not plan to have E911 Phase II compliant handsets in the foreseeable future. Finally, Samsung responded that it had a single model available -- Model N-300 -- but it was unavailable to Devon.<sup>24</sup>

In addition, Verizon Wireless in its waiver request provides the following general availability dates for handsets employing AGPS manufactured by others:

<b>Vendor</b>	<b>General Availability</b>
Audiovox	January-March 2002
Motorola	July 2002 <sup>25</sup>
LG	Fourth Quarter 2002

Source: *Verizon Wireless Waiver* at p. 13

<sup>23</sup> See e-mail from Heidi Swanson to Tracy Dybowski, dated October 24, 2001; e-mail from Seda Albert to Malik Janice, dated October 24, 2001, both of which are attached as Exhibit C to this Waiver Request (e-mails attached to this Petition have been converted to Word for ease of filing in the Commission's electronic filing system; thus, the format may be slightly different, but the contents remain unchanged). Devon agrees with Alltel's assessment that handsets based on the Qualcomm MSM3300 chipset would be quickly superseded by handsets using the MSM5100 Qualcomm chipset and it makes no sense for Devon, a small carrier, to buy these handsets for deployment when the necessary hardware and software will not be available in Devon's network until next year.

<sup>24</sup> See e-mail from Frank Gutowski to Tracy Dybowski, dated November 15, 2001, attached as Exhibit C in which Mr. Gutowski indicates that "Samsung is currently unable to provide the resources to develop an E911 phase 2 handset to address your company's [Devon] request." Further, Leap Wireless points out that Samsung and Denso, the only two handset manufacturers with currently compliant E911 Phase II handsets, stated that "they could not make the handset available to Leap" because "[e]ach of these two manufacturers has apparently entered into an arrangement with a major US carriers that prevents them from selling any of their current production 3300 handsets to Leap." *Leap Wireless Waiver* at p. 15. Further, based on the *Alltel Waiver*, Devon understands that Samsung would require a substantial minimum volume order. If Alltel with substantial units in service does not believe that it makes sense to purchase such a minimum amount of Samsung handsets, it surely makes no sense for Devon to do so since it has no current subscribers.

<sup>25</sup> Devon's discussions with Motorola distributors has confirmed this projected availability date.

Furthermore, other CDMA carriers have disclosed similar availability dates, if not later, for AGPS capable handsets using the Qualcomm MSM5100 chipset. For example, Leap Wireless concurs that CDMA handsets will not be available to smaller carriers, such as Leap Wireless and Devon, prior to second quarter next year.<sup>26</sup> It is without dispute, therefore, that none of these handset vendors had commercially available handsets using the Qualcomm MSM5100 chipset to deliver to Devon prior to October 1, 2001.

Devon supports the Commission's laudable goals of expeditiously implementing Phase II service for AGPS/handset based solutions through "seeding" AGPS-capable handsets as soon as possible so that when the necessary network software and hardware components are available Phase II service can become available to as broad a base of subscribers as possible. This very laudable goal, however, must be tempered by the cold reality of the intensely competitive CMRS marketplace and the fact that new carriers, such as Devon, have special problems associated with entering new markets. Devon as a small carrier focused on competing with wireline telephone services cannot, and should not, be required to buy handsets with the MSM3100 chipset which will be quickly superseded by less expensive models based on the MSM5100 chipset. In addition, Devon, as a new entrant, would be especially harmed by selling an expensive handset that would quickly be replaced with a less expensive model because the existing competitors in Devon's markets would quickly spread the word that Devon is selling handsets which will be replaced significantly before the standard 2 year product cycle. This will substantially blunt Devon's ability to compete in these markets or sell E911 ALI-capable handsets at all. Since competition is an important goal of the Commission's Rules, the Commission must not require Devon to undertake actions which will hamstring Devon's ability to compete, and perhaps cripple it for a substantial period of time.

In addition, Devon must be permitted to implement an economically efficient handset deployment strategy that is consistent with evolving competition between vendors, the carrier's

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<sup>26</sup> *Leap Wireless Waiver* at p. 15-16.

particular network technology, and realistic deployment dates for Phase II E911 network upgrades. Since handsets with the Qualcomm MSM5100 chipset will be available in most instances before the time frames proposed for the required network upgrades, Devon submits that it should not be required to deploy handsets using the Qualcomm MSM3300 chipset which will be expensive and superseded by lower cost handsets virtually within months after release. Since Devon's marketing model is to offer a low cost service to subscribers, it can ill-afford to sell expensive handsets when its competitors will be able to continue to sell non-Phase II compliant handsets for some time.<sup>27</sup> Devon understands that handsets using the MSM3300 chipset will be made in limited quantities and thus the carriers buying such handsets will not be able to enjoy any economies of scale in the handset prices. Further, Devon's potential customers are extremely cost sensitive and, if they are required to buy E911 Phase II-capable handsets based on the expensive MSM3300 chipset, they will not buy service at all from Devon and thus Devon will not be able to compete.

## **2. NETWORK SOFTWARE AND HARDWARE COMPONENTS**

Devon also consulted with Lucent to determine what network software upgrades and additional network elements are needed for it to implement AGPS throughout its network. In addition, Devon reviewed the waiver requests filed by other CDMA carriers to ensure that it fully understands the required activities to implement Phase II E911. Further, Devon requested Lucent to provide it with a realistic schedule of when Devon can expect delivery and installation of the necessary software upgrades and network components to implement AGPS once Devon has finished construction of its Buffalo, New York facility.

In order to deploy AGPS using the Lucent E911 Phase II solution, Devon must install at least one Position Determining Equipment ("PDE") server, which would provides location services to multiple MSCs, and a Mobile Positioning Center ("MPC"). In addition, Devon must

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<sup>27</sup> Devon as a new operator will have to sell a larger number of new subscribers on E911 Phase II handsets since its growth rate will be substantially higher than that of its competitors. Accordingly, Devon's competitors will be able to continue to sell a larger number of non-Phase II handsets than Devon which will competitively harm Devon.

install software upgrades to its MSCs and cell sites. Lucent has indicated to Devon that the GA date for the PDE is December 31, 2001 “for now” and the GA date for the MPC is February 1, 2002.<sup>28</sup> Without hindering Devon’s ability to compete in the market, not all of the necessary software and hardware components can be delivered, installed, integrated, and tested in the field for accuracy and reliability before Devon would be required to deploy the network components of AGPS pursuant to any existing Phase II PSAP request pursuant to Section 20.18(j) which may be received by Devon through second quarter of 2002. Further, Lucent has not provided any assurances that the schedule will not slip further due to a number of factors, such as the availability of handsets for testing and resolution of technical issues identified through interoperability testing of E911 technology and other vendor’s technology contributions.<sup>29</sup> Since Devon is a relatively small PCS carrier, it cannot drive Lucent to speed deployment and it is unlikely that Lucent will be able to deliver, install, integrate, and test the necessary gear for smaller licensees, such as Devon, prior to late third quarter or early fourth quarter 2002 at the earliest.

In addition, Devon agrees with Inland Cellular that smaller carriers in smaller markets, such as Inland Cellular and Devon, are generally ‘at the end of the line’ for product distribution and that it is accepted industry practice that general availability dates for large carriers, such as Verizon Wireless, Sprint, and Alltel, do not necessarily mean that smaller carriers can expect delivery within the same timeframes.<sup>30</sup> Indeed, since Devon does not have the extensive testing and deployment resources of larger carriers, it is standard practice for smaller carriers to allow larger carriers to deploy new technology first to work out any problems since their networks are generally more complex and the testing that the system would undergo is much more extensive

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<sup>28</sup> See e-mail from Frederick C. Gebert to Lou Ebert, dated November 26, 2001, attached as Exhibit D to this Waiver Request.

<sup>29</sup> Devon notes that Lucent has already had to delay its implementation of E911 Phase II components from the original date to November 9, 2001 (*Sprint Waiver* at ¶ 17) and Lucent has once again delayed it until late 2001 “for now”.

<sup>30</sup> *Inland Cellular Waiver* at p. 6.



that smaller carriers can afford. Devon also notes that Inland Cellular, which has considerably more experience in operating a system than Devon, has noticed that it “often takes anywhere from six to nine months *after* the General Availability (“GA”) date for Inland to receive equipment.”<sup>31</sup> Devon does not have any reason to believe that Inland Cellular is incorrect.

Finally, even if both the handsets and network software and other components were available today, which they are not, they would still need to be installed, integrated with existing hardware and software, and tested to ensure they provide the necessary accuracy and reliability. Based on the vendor’s current deployment time schedules it appears that Devon will not have AGPS-capable handsets by the Commission’s handset deployment milestones nor will it be able to install, integrate, and test all the necessary network software and additional network components for PSAPs that request Phase II E911 services through the second quarter of 2002 without hindering its ability to compete in the market. Given Devon’s aggressive construction schedule to meet the Commission imposed construction deadlines, Devon does not have the resources to properly test and implement the necessary network components for AGPS prior to completion of its initial construction of its systems in all of its markets. Devon will complete its construction in its last market in December 2002, so it should be able to implement AGPS by the end of the fourth quarter of 2002. In addition, since Devon is constructing its E911 Phase II systems in a centralized fashion, Devon believes that it will be able to comply with any PSAP Phase II requests received after the second quarter 2002 within the six month requirement of the Commission’s Rules.

Accordingly, the Commission should recognize that the original milestones established in its rules cannot be met and that Devon as a smaller carrier will necessarily take a “second chair” to the larger carriers in implementing E911 Phase II. Therefore, Devon respectfully requests that

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<sup>31</sup> *Inland Cellular Waiver* at p. 6. Based on this assessment, Devon could expect Lucent to deliver, install, integrate, and test the necessary software and hardware by late third quarter or early fourth quarter **assuming no delay in the current GA date**. Based on the fact that Lucent has repeatedly delayed the GA date and Lucent’s caveat in its e-mail regarding GA dates, Devon’s request to delay deployment until at the earliest fourth quarter 2002 is reasonable. Devon, however, reserves the right to petition the Commission for a further extension if Lucent materially delays the current GA dates.

the Commission grant Devon a limited partial waiver to deploy the AGPS solution on a timetable that conforms with the realistic availability of the necessary technology in the marketplace.

**B. A NETWORK-BASED SOLUTION IS NOT FEASIBLE FOR DEVON'S NETWORK**

Devon has reviewed the waiver requests filed by other CDMA carriers and notes that all of them have concluded that none of the existing network based technologies would enable them to provide Phase II services in compliance with either the accuracy or the deployment deadlines. Devon notes that Alltel, for example, reviewed responses from several network-based solutions vendors including Grayson Wireless, Cell-Loc, Radix Technologies, SigmaOne, TruePosition, and US Wireless. In each instance, Alltel posed detailed questions about the technical performance, trial procedure and deployment as well as updates on current product status. As Alltel points out, each of the responses and tests conducted to date were done in very controlled environments or in urban areas. Since Devon holds smaller second tier markets, test conducted in urban areas would have little applicability to how such technologies would operate in the suburban/rural markets held by Devon. Indeed, Devon notes that at least one network solution provider has told the Commission that “it is highly unlikely that network-based technologies in rural areas can satisfy the Commission’s existing accuracy requirements for wireless E911 unless carriers are required to undertake *very substantial expenditures* for this purpose.”<sup>32</sup>

Other CDMA carriers have reached a similar conclusion. For example, Leap Wireless who has second tier markets very similar to Devon observes that

it would be difficult for network-based solutions to provide accurate location information because of the spacing of Leap’s cell sites. ... The smaller coverage footprint means that a larger percentage of cell sites lie on the perimeter of Leap’s network than in the competitor’s network. This lowers the statistical probability that a given location will receive enough different signals that it can triangulate among multiple cells.<sup>33</sup>

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<sup>32</sup> TruePosition, *Ex Parte* Presentation to Commission in CC Docket 94-102, July 24, 2000. (emphasis added)

<sup>33</sup> *Leap Wireless Waiver* at p.p. 10-11.

Devon also agrees with Verizon Wireless that the AGPS handset solution will provide the “best and most ubiquitous location capability while presenting fewer of the problems that surfaced with the network technology.”<sup>34</sup>

Further, handset solutions do not pose the same deployment challenges as network based solutions. For example, in order to deploy many of the network based solutions, Devon would be required to locate and construct additional tower sites and direction finding antennas. This would prove difficult due to environmental, zoning, cost and other factors that would delay the construction and installation of necessary equipment. For example, AT&T, during its trials of network-based solutions, noted the substantial challenges associated with the use of Angle of Attack (“AOA”) antennas, such as loading/capacity problems for some existing base stations as well as opposition and concern from property owners and zoning authorities.<sup>35</sup> In some cases, AT&T observed that community tower sites may not be able to accommodate additional AOA antennas.<sup>36</sup> Not only have carriers recognized the particular problems with network-based solutions, the Commission itself has recognized these problems.<sup>37</sup>

In addition, all of the network-based solutions investigated by Devon require the addition of major capital infrastructure at each site as well as Devon’s switches. Since existing equipment has limited ability to precisely detect and receive the Time Difference of Arrival (“TDOA”) and AOA information on which network-based solutions must rely, Devon would be required to install new equipment at each site. Devon understands that the cost to purchase this equipment alone can run into the millions of dollars even for a modestly sized market.<sup>38</sup> Accordingly, for

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<sup>34</sup> *Verizon Wireless Waiver* at p. 3.

<sup>35</sup> AT&T Wireless Services, Inc., E911 Phase II Report, filed in CC Docket No. 94-102, November 9, 2000 at 7-8.

<sup>36</sup> *Id.* at p. 7.

<sup>37</sup> See *Third Report and Order*, Revision of the Commission’s Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems, FCC 99-245, ¶¶ 64-65 (1999).

<sup>38</sup> See *Leap Wireless Waiver* at p. 11 (“[T]he required base units were estimated to cost approximately \$25,000-\$75,000” per site.) Since a modest system may have as many as few as 50 sites, the costs for a small market may run in the millions of dollars and this cost does not include the labor required to calibrate the system through drive tests.

the above reasons, Devon has concluded that that AGPS provides the best avenue for compliance with the Commission's Phase II E911 Rules.

**C. SPECIFIC RULE SECTIONS FOR WHICH A WAIVER IS REQUESTED**

Devon seeks a limited partial waiver, to the extent one is necessary, of Sections 20.18(e) and (g) of the Commission's Rules. Section 20.18(e) of the Commission's Rules provides that all cellular and broadband PCS licensees

must provide to the designated Public Safety Answering Point Phase II enhanced 911 service, i.e., the location of all 911 calls by longitude and latitude in conformance with Phase II accuracy requirements.<sup>39</sup>

As is explained in further detail below, Devon seeks a limited partial waiver of Section 20.18(e) to provide Phase II ALI information to requesting PSAPs until the later of (a) the fourth quarter 2002, or (b) six months after receiving a PSAP request pursuant to Section 20.18(j) of the Commission's Rules.

In addition, as Devon has selected to use the hybrid AGPS solution, Devon, absent a waiver, must meet the deployment requirements of 20.18(g)(1). Section 20.18(g)(1) provides that cellular and PCS licenses which opt for the handset based solutions must begin deployment of "location-capable handsets no later than October 1, 2001" and meet a graduated schedule ending in 100 percent of new activations of location-capable handsets by December 31, 2002, and 95 percent penetration of location-capable handsets among all of its subscribers by December 31, 2005.<sup>40</sup> As demonstrated above, Devon will not have location-capable handsets with the Qualcomm MSM5100 chipset or functionally equivalent similar 3G 1XRTT handsets before mid-year 2002 at the earliest. While Devon plans to begin selling and activating AGPS handsets with the Qualcomm MSM5100 chipset as soon as they become commercially available to Devon and will diligently proceed to try and activate most of its units on AGPS handsets thereafter, it cannot meet the activation targets in full by the prescribed dates, particularly given

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<sup>39</sup> 47 C.F.R. § 20.18(e).

<sup>40</sup> 47 C.F.R. § 20.18(g)(1).

the production schedules of its major handset vendors as well as limited initial consumer demand stemming from the likely cost difference between AGPS and legacy handsets. Accordingly, to the extent one is necessary, Devon respectfully requests a limited partial deferral of each of the requirements of Section 20.18(g)(1) of the Commission's Rules as follows:

- Devon will begin sales of ALI-capable handsets with the MSM5100 Qualcomm chipset as soon as they are commercially available and tested by Devon, but in any event Devon will sell ALI-capable handsets using either the MSM3300 or MSM5100 Qualcomm chipsets if commercially available to Devon by June 30, 2002.<sup>41</sup>
- 25 percent of all new Devon activations are expected to be ALI-capable by September 30, 2002.<sup>42</sup>
- 50 percent of all new Devon activations are expected to be ALI-capable by January 31, 2003
- 100 percent of all new activations will be ALI-compliant by October 31, 2003.

Devon, however, fully expects to meet or beat the December, 2005, deadline for 95% deployment of all handsets within its networks. Once handsets with the Qualcomm MSM5100 chipset become available at no material price difference, Devon anticipates the lion's share of its activations will be using location-capable handsets and thus it will meet or beat the December 2005 95% deployment deadline. Since Devon currently has a very modest subscriber base and Devon will not start aggressively marketing its services until next year when handsets with the Qualcomm MSM5100 chipset become available, Devon expects that the vast majority of its handsets carried by its subscribers will be ALI-capable within the first twelve to twenty-four months.

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<sup>41</sup> As Qwest points out, handsets with the current generation of MSM3300 Qualcomm chipset will be offered in limited supply since Qualcomm is planning to release the MSM5100 location-capable chipset for use in the next generation of handsets at the end of the second quarter 2002. See *Qwest Waiver* at p. 17 fn. 39.

<sup>42</sup> In the unlikely event that Devon is unable to secure AGPS-capable handsets using either chipset by June 30, 2002, Devon proposes that this milestone be eliminated and Devon only have a requirement to have 50% of its activations be ALI-capable by January 31, 2003.

Further, Devon also seeks a waiver, to the extent one is necessary, to delay deployment of any network components required to implement AGPS under Section 20.18(g)(2). Section 20.18(g)(2) provides that

Once a PSAP request is received, the licensee shall, in the area served by the PSAP, within six months or by October 1, 2001, whichever is later: (i) install any hardware and/or software in the CMRS network and/or fixed infrastructure, as needed, to enable the provision of Phase II enhanced 911 service; and (ii) begin delivering Phase II enhanced service to the PSAP.<sup>43</sup>

As is demonstrated above, the necessary network software and network components to implement AGPS are not currently commercially available to Devon and may become generally available by first quarter 2002. Further, since Devon will deploy its E911 solution on a centralized basis which will assist PSAPs in the future have their E911 Phase II requests met in a timely manner, Devon will not have the necessary infrastructure equipment deployed in Buffalo, New York until mid-March 2002. Further, as discussed above, Devon has limited technical resources and those resources will be devoted until late in 2002 to aggressively constructing Devon's PCS licenses, Devon will not be able to install, integrate, and test the necessary E911 Software and hardware until fourth quarter 2002 without hindering Devon's ability to compete in the market. Accordingly, to accommodate the deployment and testing of the necessary mobile switching center ("MSC") software upgrades and, to the extent necessary, deployment and testing of network elements of the AGPS solution through fourth quarter 2002, Devon seeks a waiver to provide E911 ALI services to a valid PSAP request at the later of: the fourth quarter 2002, or six months following Devon's receipt of a valid PSAP request pursuant to Section 20.18(j) of the Commission's Rules for Phase II location information.<sup>44</sup>

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<sup>43</sup> 47 C.F.R. § 20.18(g)(2).

<sup>44</sup> Devon does not believe that a waiver is necessary of the Phase I Rules since Devon will be completing the current PSAP requests within 6 months of initial system construction. However, to the extent that the Commission disagrees, Devon also seeks a waiver, if one is necessary, of the requirement that Devon provide Phase I E911 pursuant to Section 20.18(d) until the later of: March 17, 2001, or six months of a valid Phase I PSAP request made pursuant to Section 20.18(j).

As is demonstrated in greater detail below, a grant of these limited waiver requests meets the Commission's waiver requirements and serves the public interest.

#### **D. APPLICABLE WAIVER STANDARDS**

A waiver of the Commission's Rules is appropriate if either (a) the underlying purpose of the rule for which waiver is sought would not be served by strict enforcement and the grant of the requested waiver is in the public interest, or (b) there are unique or unusual factual circumstances that render application of the rule unduly burdensome, inequitable, or contrary to the public interest or there is no reasonable alternative.<sup>45</sup> With specific reference to E911 service deployment, the Commission has acknowledged that "there could be instances where technology-related issues or exceptional circumstances may mean that deployment of Phase II may not be possible by October 1, 2001," and indicated that "these cases could be dealt with through individual waivers as these implementation issues are more precisely identified."<sup>46</sup> Indeed, the Commission has granted waivers of Section 20.18 based, in part, on the absence of a technical solution for supplying Phase II location information<sup>47</sup> and a number of other waivers requests are pending.<sup>48</sup> Further, although not specifically stated in the Commission's Rules, the Commission has made clear that parties seeking a waiver of the Phase II E911 Rules should demonstrate a "clear path to full compliance."<sup>49</sup>

In the *Fourth MO&O*, the Commission set forth guidelines for waivers of the Commission's E911 service deployment Rules. The Commission found that waiver requests were to be "specific, focused and limited in scope."<sup>50</sup> In addition, the Commission stated that "carriers should undertake concrete steps necessary to come as close as possible to full

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<sup>45</sup> 47 C.F.R. §§ 1.3, 1.925; *See also Northeast Cellular Telephone Co. v. FCC*, 897 F.2d 1164, 1166 (D.C. Cir. 1990)(citing *WAIT Radio v. FCC*, 418 F.2d 1153, 1159 (D.C. Cir. 1969), *cert. denied*, 409 U.S. 1029 (1972)).

<sup>46</sup> *Fourth MO&O* at ¶ 44.

<sup>47</sup> *Fourth MO&O* at ¶¶ 55-68; *Sprint Waiver*; and *Verizon Wireless Waiver*.

<sup>48</sup> *See, e.g., Alltel Waiver, Inland Wireless Waiver, Leap Waiver, Qwest Wireless Waiver, and Carolinas PCS Waiver.*

<sup>49</sup> *Fourth MO&O* at ¶ 44.

<sup>50</sup> *Fourth MO&O* at ¶ 44.

compliance (e.g., selecting ALI technologies or vendors, timely placing orders for necessary equipment, performing other necessary preparatory work) and should document their efforts aimed at compliance in support of any waiver request.”<sup>51</sup> Further, “[i]f deployment is scheduled but for some reason must be delayed, the carriers should specify the reason for the delay and provide a revised schedule.”<sup>52</sup> Finally, in its *Notice*, the Commission reiterated the criteria of the *Fourth MO&O* and requested that carriers provide “a description and history of its Phase I deployment, information concerning pending, valid Phase II requests, and other information that will assist the Commission and affected parties in monitoring and coordinating the deployment of E911 Phase II.”<sup>53</sup>

**E.      DEVON’S LIMITED WAIVER REQUEST IS CONSISTENT WITH  
THE COMMISSION’S RULES AND THE GUIDANCE PROVIDED  
BY THE *FOURTH MO&O* AND THE *NOTICE***

The limited waiver request sought by Devon clearly meets the Commission standards for a waiver of the Commission’s Rules and the considerations articulated in the *Fourth MO&O* and the *Notice*. Devon does not seek a “broad, generalized” waiver, but rather seeks a limited waiver which is “specific, focused and limited in scope” and “outlines a clear path to full compliance.”<sup>54</sup> The Commission has recognized special circumstances that warrant a waiver include “technology-related” issues.<sup>55</sup> Devon’s waiver request is driven not by a failure of Devon to act, but rather by “technology-related” issues stemming from delays and failures of its suppliers to develop and have commercially available the necessary handsets, network software and other network equipment to allow Devon to be in compliance with the Commission’s Rules by the milestones imposed by the Commission’s Rules. Devon is not a manufacturer, designer, or technology vendor so it cannot predict with any precision when solutions promised by third

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<sup>51</sup> *Id.*

<sup>52</sup> *Id.*

<sup>53</sup> *Notice* at p. 2.

<sup>54</sup> *Fourth MO&O* at ¶ 44.

<sup>55</sup> *Fourth MO&O* at ¶ 43.



party equipment vendors will exist for Devon' networks and handsets, but Devon has received assurances from its handset and network vendors that the necessary handsets, network software and network components will be available consistent with Devon' waiver request.

In addition, Devon has undertaken its E911 obligations seriously. Devon has had on-going discussions with its vendors regarding Phase I and Phase II compliance and has taken into account in its deployment schedule the need to deploy Phase I location information within six months of completing construction of its markets. In addition, Devon has taken the following concrete steps to become in compliance with the Commission's Phase II E911 Rules. First, Devon has selected a Phase II technology and has filed the required Reports with the Commission on its network deployment. Second, Devon has had discussions with handset vendors and reviewed other carrier's waiver filings to determine when handsets with location-capability will be available for distribution by Devon. Third, Devon has had discussions with its switch vendor – Lucent – to discuss what actions will be necessary for Devon to implement AGPS. Fourth, Devon has determined what network software and network equipment it will need to implement the AGPS capability in its network and has devised a planned implementation plan to deploy AGPS in those areas where it has a Phase II PSAP request within the timeframes proposed in the instant waiver.

Further, Devon is proposing to deploy a Phase II location technology that satisfies the Commission's directive that "if no solution is available that fully complies, the carrier [is] expected to employ a solution that comes as close as possible, in terms of providing reasonably accurate location information as quickly as possible."<sup>56</sup> Devon is working to ensure that it has Phase I location information available to all of its requesting PSAPs within six months of completing construction of its markets and expects to be able to provide the increased Phase II information to those requesting PSAPs within the timeframes outlined in this waiver. Further, this instant waiver request also provides a revised schedule that will ensure compliance as soon

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<sup>56</sup> *Fourth MO&O* at ¶ 45.

as the necessary network software and hardware components, and handsets are available. Finally, as requested in the *Notice*, Devon has attached to this Waiver Request information showing the current valid Phase I and Phase II PSAP requests and the dates Devon expects to fulfill Phase I to those PSAPs and the dates Devon expects to have its markets constructed. Accordingly, Devon has met the Commission's requirements for a limited partial waiver and the Commission should expeditiously grant such waiver.

### **III. A GRANT OF DEVON REQUESTED LIMITED WAIVER WOULD SERVE THE PUBLIC INTEREST**

The public interest will be served by a grant of Devon's limited partial waiver request of the Commission's Phase II E911 Rules. The primary consideration in weighing the public interest in waivers of the Phase II E911 Rules is the Commission's Section 1 mandate of "promoting safety of life and property through the use of wire and radio communication . . . ."<sup>57</sup> Devon's use of AGPS location technology will produce the same public safety benefits as those cited by the other CDMA carriers, including those to whom the Commission has previously granted waivers, such as Sprint and Verizon Wireless. Further, use of the AGPS technology will provide ALI location capability prior to it being available through network-based solutions. Finally, an AGPS solution will provide substantially more accurate ALI to PSAPs in rural and suburban areas than network based solutions. The public safety benefits of more accurate ALI are undisputed and will inure to *all* of Devon's customers.<sup>58</sup>

In contrast, without use of the AGPS ALI solution, it is unlikely that Devon will be able to meet the Commission's E911 Phase II requirements any more quickly using a network-based solution. Devon understands its responsibility to "employ a solution that comes as close as possible" to full compliance if its preferred location solution is not available.<sup>59</sup> At this time, however, Devon, a small regional carrier, does not have the necessary clout with equipment

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<sup>57</sup> 47 U.S.C. § 151.

<sup>58</sup> *Third Report and Order*, Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems, CC Docket 94-102, FCC 99-245 (*rel.* October 6, 1999).

<sup>59</sup> *See id.* ¶ 45.

manufacturers to encourage the timely development of a successful, alternative CDMA location technology. Moreover, such efforts would be unnecessarily duplicative as the AGPS location technology is already close to being available. Indeed, such efforts would unnecessarily raise concerns for interoperability between Devon' Phase II solutions and other CDMA carriers to the detriment of consumers. Since virtually every other CDMA carrier is deploying AGPS, such standard is developing into a *de facto* standard for CDMA networks. The interoperability of Devon' and other CDMA networks will help ensure the availability of Phase II service to customers roaming into Devon' service areas.<sup>60</sup> Granting a waiver to Devon to deploy the AGPS technology will enable CDMA carriers, such as Devon, to seamlessly hand off emergency calls between their networks in the very near future. If Devon does not deploy AGPS, roaming customers would not be provided with E911 ALI services. Thus, the public safety benefits associated with the CDMA ALI technology will be distributed more widely and quickly to Devon' wireless customers than would be possible with any other location solution. Accordingly, the only technology that Devon can deploy in the near future which will meet the Commission's desire to have Phase II E911 location-capability deployed as ubiquitously as possible is for Devon to deploy the AGPS technology.

In addition, as discussed at length above, Devon understands that the other network based solutions to provide ALI information are not available to meet the Commission's timeframes and may not meet the Commission's accuracy requirements as well. Devon is not choosing between a technology that can be deployed today and one that cannot be. Rather, neither technology is available for deployment today. Accordingly, since the network-based solution is not yet available, the public interest would be served by allowing Devon the short period of time necessary to deploy it rather than wait for the network-based solution.

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<sup>60</sup> See *Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems*, Third Report and Order, CC Docket No. 94-102, FCC 99-245, 14 FCC Rcd. 17388, ¶¶ 55-61 (rel. Oct. 6, 1999)(requiring the interoperability of handset-based solutions and a "best practice" approach for providing ALI to roamers who do not have ALI-capable handsets).

Furthermore, the public interest would not be served if carriers, such as Devon, merely deploy AGPS without testing. Since smaller carriers generally rely on the larger carriers to deploy and test new technology first, new technology is better tested and less likely to have problems than if smaller carriers such as Devon implement it first. The public is not served by having technology deployed which either does not work every time or provides inaccurate location information. Accordingly, the public interest is served by allowing smaller carriers, such as Devon, to deploy after the larger carriers have at least performed a First Office Application for the software and the necessary hardware components.

Moreover, since handsets will not become generally available for AGPS until the middle of next year, a delay in implementing the network components of Phase II will not unnecessarily delay E911 services to the public. Devon lauds the Commission's goal to "seed" location-capable handsets in advance of widespread deployment of the network software and hardware components to deliver Phase II ALI to PSAPs. However, the plain truth is that since the hardware components are a necessary part of delivering Phase II information, a delay in delivering handsets until the necessary infrastructure is in place will not materially delay Phase II roll-out. This is especially true with carriers, such as Devon, who do not have a significant embedded base of customers. Since Devon will have the lion's share of its new activations on AGPS handsets as soon as they become available, Devon fully expects that it will reach the 95% penetration levels of location-capable handsets in its customer base long before the December 31, 2005. Further, the Commission must weigh the costs to small carriers, such as Devon, to deploy expensive handsets using the Qualcomm MSM3300 chipset that will quickly become superseded by lower cost handsets against the small delay in implementation sought by Devon. Accordingly, the public interest will be served by the small delay sought by Devon deploy Qualcomm MSM5100 chipset handsets.

The public interest will also be served by allowing Devon to first construct most of its markets and resolve any network concerns before it is required to immediately begin deploying additional software and hardware into its network. As the Commission full well knows, a PCS

system is a highly complex system of base stations, MSCs, and other hardware and software. Since Devon is in the process of aggressively constructing its network, Devon anticipates there will be many problems to be resolved before its systems will be able to provide commercial service. Layering in additional complexity through E911 Phase II hardware and software – especially since it is untested – violates every principle of good engineering practice because Devon will not be able to isolate network problems between the non-E911 hardware and software and E911 Phase II hardware and software. As Sprint pointed out, the Lucent software itself failed on its existing Rhode Island network and that failure had to be corrected and the software re-tested. Such a failure in Devon’s network would be especially difficult to troubleshoot since Devon would not know whether the failure was caused by the E911 software or other equipment and software. Accordingly, the public interest is not served by having Devon attempt to implement Phase II on its systems prior to such systems becoming stable and Devon successfully implementing Phase I.

Finally, a failure to grant the requested waiver would be discriminatory. The Commission has already granted Sprint and Verizon Wireless waivers of the current implementation schedule and recognized that the requisite handsets and infrastructure equipment and switch software were not available. Further, the Commission recognized and concurred in Sprints and Verizon Wireless’ decision to deploy a AGPS solution. Accordingly, since Devon is similarly situated to Sprint and Verizon Wireless, the public interest is served by granting Devon the requested limited partial waiver.

#### **IV. CONCLUSION**

For the foregoing reasons, Devon submits that the requested limited partial waiver will serve the public interest, convenience and necessity, and respectfully asks that the Commission grant this petition as soon as possible.

Respectfully submitted,

**DEVON MOBILE COMMUNICATIONS L.P.**

By:

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